

REMARKS

We are in receipt of the Office Action dated March 2, 2004, and the following remarks are made in light thereof.

Claims 1-40 are pending in the application. Pursuant to the Office Action, claims 1-35 stand rejected under 35 USC 103 as being unpatentable over Black, Jr. et al. 5,403,604 in view of Lawhon et al. 4,643,902, Dechow et al. 4,522,836 and Puri 4,439,458. Claims 26-40 stand rejected under 35 USC 103(a) as being unpatentable over the combined references applied to claims 1-35, and further in view of Norman et al. 4,666,721. The claims are rejected for the reasons of record cited in the Office Action of September 17, 2003. The action is made final.

By way of the foregoing amendments, each of the independent claims 1, 22, 33, 34, and 35 calls for the step of measuring the pH of the deacidified juice exiting the resin column and, if the pH is greater than about 4.5, adding a portion of initial single strength juice flow having suspended solids in a ratio of between about 1:1 and 2:1 of initial juice to deacidified juice. Support for this limitation is found in the specification, paragraph [0056]. This is required because, at least in the initial stages of deacidification when the resin column is most effective, the acidity level of the deacidified juice may be sufficiently low that undesirable microbial activity in the deacidified juice could occur. This is a different step from

the blending of the deacidified juice with a second portion of the initial citrus juice flow to achieve a final blend. Final blending is what is referred to in paragraph [0062] of the specification. While the term "immediately" is not explicitly defined, it can be seen, by reference to Fig. 1, that a portion of the untreated initial single-strength juice is diverted to the bypass line 15 and is added to the deacidified juice upon its exit from the resin columns. This also clarifies that this portion of the initial juice flow is not combined in a batch tank, as is the case with the final blending.


In contrast, Lawhon et al. does not teach using a portion of the initial juice flow to combine with the reduced-acid portions. Instead, Lawhon et al. uses the remainder of the non-reduced-acid RO retentate or UF permeate. See column 6, lines 28-32. Thus, Lawhon et al. uses a separated stream from a part of its ultra filtration process, while the present invention uses a non-separated initial juice stream. In addition, Lawhon et al. adds back the non-acid-reduced portion in juice reconstitution in order to make a final blend, and not immediately after deacidification to prevent microbial activity as in the present invention. This is significant, particularly because there may be a time delay between deacidification and final blending in which undesired microbial activity may occur. In the present invention, the pH of the deacidified juice is

monitored and initial juice immediately added upon the deacidified juice exiting the resin column. In addition, a ratio of initial juice to deacidified juice is specified: from about 1:1 to about 2:1. Nothing in the cited references discloses or suggests such a process.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of the pending claims and to allow the application.

Respectfully submitted,

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Stephen B. Heller
Registration No.: 30,181

COOK, ALEX, McFARRON, MANZO,
CUMMINGS & MEHLER, LTD.
200 West Adams Street, Suite 2850
Chicago, Illinois 60606
(312) 236-8500